UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
AIR AND
RADIATION

March 23, 2022

Dear Contractor:

The U.S. Environmental Protection Agency's Office of Land and Emergency Management, requests that you submit technical and price quotations in response to this solicitation. This solicitation is being issued for services offered under Blanket Purchase Agreement (BPA), 68HERD20A0004. The services sought from this solicitation are included in the attached Statement of Work (SOW) entitled "**The Vision, Science and Data to Achieve a Circular Economy**." The Request for Quotation (RFQ) number for this requirement is amendment 0001 of PR-OLEM-22-00037.

The Government intends to issue a single time and material call order against the Blanket Purchase Agreement. The period of performance for this requirement will be 12 months from the date of award and two (2) 12-month option periods. The award of the call order will be based on a best value basis, using the procedures prescribed in the subject BPA and the attached evaluation criteria. The contractor is advised to examine the attached Statement of Work (SOW) for potential organizational conflicts of interest.

The deadline for questions is **11:00 AM EST on March 30, 2022**. All requests can be electronically submitted to Jazmine Harris at anthonyharris.jazmine@epa.gov.

An electronic copy of the quotation shall be received NLT **3:00 PM EST** on **Wednesday, April 6, 2022** to Jazmine Harris at anthonyharris.jazmine@epa.gov**.**

Very Respectfully,

Jazmine Anthony Harris

Jazmine Harris
Contract Specialist

Attachments:
1. Quotation Requirements
2. Evaluation Criteria
3. Statement of Work

Attachment 1: Quotation Requirements

The contractor response must be submitted in two parts (separate PDF Files): a technical quotation and a price quotation. Each of the parts shall be separate and complete so that evaluation of each may be accomplished independently. Both the technical quotation and price quotation shall be submitted via email to the Contract Specialist at anthonyharris.jazmine@epa.gov. **Omit all pricing details from the Technical Quotation. Please price each task separately.**

Requirements for Technical Quotation

The contractor is required to submit a comprehensive and complete technical quotation that demonstrates their ability to perform the tasks described in the subject Statement of Work. The contractor must be responsive to all the requirements of this notice and provide sufficient information to allow evaluation of the technical quotation per the evaluation criteria. The technical quotation shall be prepared using the following guidance:

The maximum length of the submitted technical quotation shall be limited to number of 10 single space pages including all tables and figures. The technical quotation shall be submitted on 8 ½" x 11" pages, using no less than ten (10) point character size and no less than an average of 3/4" around each page for margins. Page numbers shall have no less than a 3/8" margin from the page edge. Tables and figures shall use no smaller than ten (10) point character size and must be clear and readable. The following items are excluded from the above stated page limitation: letters of transmittal, cover page, table of contents, resumes, and blank pages. The contractor is required to adhere to all of the aforementioned page limitations. Information found on pages that exceed any page limitation will not be considered.

Requirements for Price Quotation

Contractor shall submit a time-and-materials quotation for this requirement. The quotation shall cover the following period of performance: **12 months from the date of award and two (2) 12-month option periods.** The Contractor shall use the labor categories and rates found within their respective Blanket Purchase Agreement (BPA), unless further discounts are offered. Moreover, Contractors shall propose and utilize the labor rates in effect when the work is projected to occur. The quotation shall include pricing for all labor categories the contractor determined necessary for successful technical performance. The total proposed price shall be based on the fully loaded labor rates and shall consider the mix of labor categories and level of effort required to perform the services described in the statement of work. The price quotation shall also specify the estimated total price to complete each task listed in the statement of work.

Requirements for Quality Assurance Project Plan

The contractor shall prepare a Quality Assurance Project Pan (QAPP). The QAPP must be approved prior to the start of any literature searches (existing data), data collection, gathering, synthesizing, or data generation (laboratory) work. A draft QAPP shall be delivered to the TOCOR within 4 weeks of the award. The TOCOR will review the Draft QAPP and provide comments back to the Contractor within 2 weeks. A Revised QAPP shall be submitted to the TOCOR within 7 working days after receipt of the EPA's comments.

Other Direct Costs (ODCs)
The contractor shall identify and clearly delineate all other direct costs within their price quotation. The contractor shall provide a clear and detailed narrative for each other direct cost proposed, directly correlating the cost with the specific task it supports. The narrative should also explain the rationale for the proposed estimate for each of the other direct costs proposed.

The price quotation shall also include a standalone table that clearly identifies all the labor categories and rates proposed for this requirement.

Submit a Price Quotation with the following elements in the price quotation for each contract year:

- Fixed Labor Rate in accordance with published rates for all labor categories, which includes Key Personnel and all other staff proposed
- A description of labor categories proposed.
- Estimated Level of Effort per task, per labor category.
- Any applicable or anticipated travel costs.
- ODC's.

The format below is preferred, however, the number of labor categories proposed is at the offeror's discretion and the format can be modified accordingly.

PRICE TEMPLATE

Task Areas	**Labor Category**	**Hours**	**Cost**
Task 1: Task Order Administration (Base and All Option Periods)	Sr. Program Manager 3 Sr. Environmental/ Chemical Engineer 2 Sr. Environmental Statistician 2 Sr. Environmental Scientist 3 Sr. Environmental Scientist 2 Sr. Environmental Scientist 1 Sr. Environmental Economist 3 Sr. Environmental Analyst 2 Sr. Document Design/Production Midlevel Environmental/Chemical Engineer 2 Midlevel Environmental Statistician Midlevel Environmental Scientist 2 Midlevel Environmental Economist 3 Midlevel Environmental Analyst 2 Midlevel Editor/Writer Midlevel Document Design/Production Jr. Environmental/Chemical Engineer Jr. Environmental Economist 2 Jr. Environmental Scientist 2		

	Jr. Document Design/Production		
Task 2: Reports, Documents and Analysis (Base Period)	Sr. Program Manager 3 Sr. Environmental/ Chemical Engineer 2 Sr. Environmental Statistician 2 Sr. Environmental Scientist 3 Sr. Environmental Scientist 2 Sr. Environmental Scientist 1 Sr. Environmental Economist 3 Sr. Environmental Analyst 2 Sr. Document Design/Production Midlevel Environmental/Chemical Engineer 2 Midlevel Environmental Statistician Midlevel Environmental Scientist 2 Midlevel Environmental Economist 3 Midlevel Environmental Analyst 2 Midlevel Editor/Writer Midlevel Document Design/Production Jr. Environmental/Chemical Engineer Jr. Environmental Economist 2 Jr. Environmental Scientist 2 Jr. Document Design/Production		
Task 3: Support for River Pollution Reduction (Base Period)	Sr. Program Manager 3 Sr. Environmental/ Chemical Engineer 2 Sr. Environmental Statistician 2 Sr. Environmental Scientist 3 Sr. Environmental Scientist 2 Sr. Environmental Scientist 1 Sr. Environmental Economist 3 Sr. Environmental Analyst 2 Sr. Document Design/Production Midlevel Environmental/Chemical Engineer 2 Midlevel Environmental Statistician Midlevel Environmental Scientist 2 Midlevel Environmental Economist 3 Midlevel Environmental Analyst 2 Midlevel Editor/Writer Midlevel Document Design/Production Jr. Environmental/Chemical Engineer Jr. Environmental Economist 2 Jr. Environmental Scientist 2 Jr. Document Design/Production		
Task 4: Recycling Market Analysis (Base Period)	Sr. Program Manager 3 Sr. Environmental/ Chemical Engineer 2 Sr. Environmental Statistician 2 Sr. Environmental Scientist 3 Sr. Environmental Scientist 2 Sr. Environmental Scientist 1 Sr. Environmental Economist 3 Sr. Environmental Analyst 2 Sr. Document Design/Production Midlevel Environmental/Chemical Engineer 2		

	Midlevel Environmental Statistician Midlevel Environmental Scientist 2 Midlevel Environmental Economist 3 Midlevel Environmental Analyst 2 Midlevel Editor/Writer Midlevel Document Design/Production Jr. Environmental/Chemical Engineer Jr. Environmental Economist 2 Jr. Environmental Scientist 2 Jr. Document Design/Production		
Task 5: Bipartisan Infrastructure Law - Battery Collection Best Practices and Voluntary Labeling Guidelines: Implementation Strategy and Reports (Base Period)	Sr. Program Manager 3 Sr. Environmental/ Chemical Engineer 2 Sr. Environmental Statistician 2 Sr. Environmental Scientist 3 Sr. Environmental Scientist 2 Sr. Environmental Scientist 1 Sr. Environmental Economist 3 Sr. Environmental Analyst 2 Sr. Document Design/Production Midlevel Environmental/Chemical Engineer 2 Midlevel Environmental Statistician Midlevel Environmental Scientist 2 Midlevel Environmental Economist 3 Midlevel Environmental Analyst 2 Midlevel Editor/Writer Midlevel Document Design/Production Jr. Environmental/Chemical Engineer Jr. Environmental Economist 2 Jr. Environmental Scientist 2 Jr. Document Design/Production		
Task 6: Support for development of a web-based interface for WARM and Materials Dashboard (Base and All Option Periods)	Sr. Program Manager 3 Sr. Environmental/ Chemical Engineer 2 Sr. Environmental Statistician 2 Sr. Environmental Scientist 3 Sr. Environmental Scientist 2 Sr. Environmental Scientist 1 Sr. Environmental Economist 3 Sr. Environmental Analyst 2 Sr. Document Design/Production Midlevel Environmental/Chemical Engineer 2 Midlevel Environmental Statistician Midlevel Environmental Scientist 2 Midlevel Environmental Economist 3 Midlevel Environmental Analyst 2 Midlevel Editor/Writer Midlevel Document Design/Production Jr. Environmental/Chemical Engineer Jr. Environmental Economist 2 Jr. Environmental Scientist 2 Jr. Document Design/Production		

Task 7: Comment Review and Summary Report (Base and Option Periods)	Sr. Program Manager 3 Sr. Environmental/ Chemical Engineer 2 Sr. Environmental Statistician 2 Sr. Environmental Scientist 3 Sr. Environmental Scientist 2 Sr. Environmental Scientist 1 Sr. Environmental Economist 3 Sr. Environmental Analyst 2 Sr. Document Design/Production Midlevel Environmental/Chemical Engineer 2 Midlevel Environmental Statistician Midlevel Environmental Scientist 2 Midlevel Environmental Economist 3 Midlevel Environmental Analyst 2 Midlevel Editor/Writer Midlevel Document Design/Production Jr. Environmental/Chemical Engineer Jr. Environmental Economist 2 Jr. Environmental Scientist 2 Jr. Document Design/Production		
Task 8: Stakeholder Engagement and Outreach to Support Development of Reports/Strategies (Base and All Option Periods)	Sr. Program Manager 3 Sr. Environmental/ Chemical Engineer 2 Sr. Environmental Statistician 2 Sr. Environmental Scientist 3 Sr. Environmental Scientist 2 Sr. Environmental Scientist 1 Sr. Environmental Economist 3 Sr. Environmental Analyst 2 Sr. Document Design/Production Midlevel Environmental/Chemical Engineer 2 Midlevel Environmental Statistician Midlevel Environmental Scientist 2 Midlevel Environmental Economist 3 Midlevel Environmental Analyst 2 Midlevel Editor/Writer Midlevel Document Design/Production Jr. Environmental/Chemical Engineer Jr. Environmental Economist 2 Jr. Environmental Scientist 2 Jr. Document Design/Production		
	Subtotals		
	Total Labor Cost		
	***Other Direct Costs (ODC's)**		
	Total (Time and Material with Labor and ODC's)		

*List all ODC's

Court Reporter
Translator
Hotel

Transcripts
Postage
Supplies

Format

The price quotation shall be submitted on 8 ½" x 11" pages, using no less than ten (10) point character size and no less than an average of 3/4" around each page for margins. Page numbers shall have no less than a 3/8" margin from the page edge. Tables and figures shall use no smaller than ten (10) point character size and must be clear and readable. The page limitation does not apply to price quotation information.

The total **estimated** level of effort for this requirement is **8,750** hours, with a breakdown by task as follows:

Task	Estimated Base Hours	Estimated Option Period 1	Estimated Option Period 2
Task 1: Task Order Administration (Base and All Option Periods)			
Task 2: Reports, Documents and Analysis (Base Period)			
Task 3: Support for River Pollution Reduction (Base Period)			
Task 4: Recycling Market Analysis (Base Period)			
Task 5: Bipartisan Infrastructure Law - Battery Collection Best Practices and Voluntary Labeling Guidelines: Implementation Strategy and Reports (Base Period)			
Task 6: Support for development of a web-based interface for WARM and Materials Dashboard (Base and All Option Periods)			
Task 7: Comment Review and Summary Report (Base and Option Periods)			
Task 8: Stakeholder Engagement and Outreach to Support Development of Reports/Strategies (Base and All Option Periods)			
ESTIMATED TOTAL	6,600	1,480	670
ESTIMATED BASE AND ALL OPTION TOTAL	8,750		

The purpose of this attached SOW is to ensure that the foundation of our strategy and goal efforts for the next ten years are based in sound science and research. Supporting the following task:

Task 1: Task Order Administration (Base and All Option Periods)
Task 2: Reports, Documents and Analysis (Base Period)

Task 3: Support for River Pollution Reduction (Base Period)
Task 4: Recycling Market Analysis (Base Period)
Task 5: Bipartisan Infrastructure Law - Battery Collection Best Practices and Voluntary Labeling Guidelines: Implementation Strategy and Reports (Base Period)
Task 6: Support for development of a web-based interface for WARM and Materials Dashboard (Base and All Option Periods)
Task 7: Comment Review and Summary Report (Base and Option Periods)
Task 8: Stakeholder Engagement and Outreach to Support Development of Reports/Strategies (Base and All Option Periods)

Attachment 2: Evaluation Criteria

Award will be made to the responsive, responsible contractor who provides the best value solution to the Government. In determining best-value, all evaluation criteria other than price, when combined are significantly more important than price. The non-price criteria are of equal importance.

Each quotation will be evaluated according to the following price and non-price criteria:

Technical Capability: Technical capability will be evaluated on the overall technical approach for accomplishing this requirement, including proposed strategy/steps to perform discrete Tasksoutlined in this SOW, and outline how the strategy will result in the most useful product for the Government and industry. Propose innovative yet practical approaches.

Key Personnel and Staffing Mix: The Key Personnel and staffing mix will be evaluated on the quality of the proposed labor mix and level of effort. The specified the staff selected and their relevant experience to RTR rulemaking for each of the relevant tasks will be evaluated. Recommended personnel experience should be summarized as part of the quote along with providing resumes as an attachment. Each quote should specify the Contractor's intent and approach for using subcontractors.

Price: This refers to the total expected cost of performing the outlined tasks and subtasks. Quotes will be evaluated for realism and reasonableness with price as a criterion under a "best- value to the Government" approach. Ensure your price quote is broken out by tasks as identifiedin the SOW.

Attachment 3: Statement of Work

I. Title of Task Order: The Vision, Science and Data to Achieve a Circular Economy

II. Task Order Contracting Officer's Representative (TOCOR):

Swarupa Ganguli
Acting Branch Chief
Resource Conservation Branch
EPA/OLEM/ORCR
1200 Pennsylvania Avenue NW (MC 5306P)
Washington, DC 20460
202-566-0290 – office
Ganguli.Swarupa@epa.gov

Alternative Task Order Contracting Officer Representative:

Nicole Villamizar
Associate Division Director
Resource Conservation and Sustainability Division
EPA/OLEM/ORCR
1200 Pennsylvania Avenue NW (MC 5306P)
Washington, DC 20460
(202) 566-0282- office
(571) 317-9371 – cell
Villamizar.Nicole@epa.gov

III. Period of Performance:

The Period of Performance for this Task Order begins on the date the Contracting Officer signs the approved Task Order. The Period of Performance for this requirement includes a 12-month Base Period and two additional 12-month Option Periods. The Period of Performance concludes on the termination date of the contract, in accordance with this task order and any subsequent call order modifications.

IV. Background:

The U.S. Environmental Protection Agency's (EPA) Office of Resource Conservation and Recovery (ORCR) is responsible for development of national policy for the safe management of solid and hazardous waste in such a way that protects human health and the environment. This responsibility is mandated through the Resource Conservation and Recovery Act (RCRA) and includes goals to conserve resources by reducing waste, prevent future waste disposal problems by enforcing regulation and clean up areas where waste may have spilled, leaked, or where there has been improper disposal.

The EPA encourages a Sustainable Materials Management (SMM) approach, which promotes the systemic and productive use and reuse of materials over their life cycles, while minimizing

the impact on the environment. This requires transitioning from traditional waste management and end-of-life approaches to environmental protection to more holistic systems solutions. A "circular economy" means an economy that uses a systems-focused approach and involves industrial processes and economic activities that—(A) are restorative or regenerative by design; (B) enable resources used in such processes and activities to maintain their highest values for as long as possible and (C) aim for the elimination of waste through the superior design of materials, products, and systems (including business models). It is a change to the model in which resources are mined, made into products, and then become waste. A circular economy reduces material use, redesigns materials to be less resource intensive, and recaptures "waste" as a resource to manufacture new materials and products. Circularity is embraced within the SMM approach that EPA and other federal agencies have pursued since 2009. A circular economy approach under the SMM umbrella demonstrates continuity in our emphasis on reducing lifecycle impacts of materials, including climate impacts, reducing the use of toxics, and decoupling materials use from economic growth.

The future work of ORCR was transformed in December 2020 when Congress passed Save Our Seas 2.0 Act. This new piece of legislation was significant for ORCR for several reasons. First, it defined the term "circular economy" for the first time for the U.S. government. Second, it gave EPA new authority to provide grants for solid waste management infrastructure. Third, it requested a post-consumer materials management strategy to reduce plastic waste and other post-consumer materials in waterways and oceans. Lastly, it tasked EPA with conducting a variety of reports on plastics.

Save Our Seas 2.0 Act and its direction to EPA, as well as the priorities of the new Administration, meant that ORCR reframed its draft National Recycling Strategy into the first in a series on building a circular economy for all. This strategy will form the basis of our vision for the next ten years while we work to achieve the newly stated national goal of increasing recycling to 50% by 2030. With that, ORCR's approach to the data to support the new strategy and the new goal, as well as the science of a circular economy, have become front and center. Because of this new direction and vision, ORCR is rethinking its approach to the data supporting the program, the national goal, and a circular economy. In addition, ORCR wants to ensure that the best existing research and data are utilized in support of EPA's policy development both nationally and internationally to support a circular economy. Lastly ORCR, wants to ensure that any research and data gaps are identified and planned for to support the future of this work.

Recycling as Part of a Circular Economy – Many types of materials are generated in the United States and collected for use as raw materials in other processes. Material such as paper, plastics, aluminum, steel, glass, textiles, and organics are generated in residential and commercial settings; collected and processed for reuse; and are used as feedstocks for manufacturing in various industry sectors. Depending on the stage of the recycling process, stakeholders may have different goals and objectives associated with their actions. For example, local governments want large quantities of materials recovered at low-cost, so collectors implement programs to maximize quantities collected, often adversely impacting the quality of the materials collected. Processors want less contamination so they can reduce processing costs, operate more efficiently, and optimize their operations. End-use markets want materials of high quality that meet their specifications as raw materials to make products that will eventually be

used and hopefully recovered for reuse/recycling. Compounding the complexities of recovering materials is the fact that markets change; specifications associated with markets change; and, since recovered materials are commodities, they are subject to the same domestic and international fluctuations of supply and demand as other commodities.

EPA plays several roles as part of the circular economy, including partner, convener, influencer, and provider of funds. EPA provides funding in the form of grants, such as the Sustainable Materials Management Anaerobic Digestion (AD) Funding Opportunity, which focuses on a specific management pathway for food and other organic waste. EPA also provides funding in the form of other types of grants that support additional stages of the circular economy, such as making improvements to state and local waste management systems. In addition, the FY22 President's budget, the draft FY22 appropriations bills, as well as the Senate infrastructure bill contemplate funding to support an infrastructure grant program and a public education and outreach grant program.

Recent changes to international recycling markets imposed by China and other countries have increased the need to develop markets and enhance materials management infrastructure domestically. At the same time, consumer confusion about what can be recycled results in continuous contamination of both recycling and organic material streams, and contamination contributes to poor quality feedstocks, impeding development of markets for both classes of materials. Additionally, the U.S. recycling industry urgently needs updated infrastructure to keep up with today's recycling streams and infrastructure that can produce a high-quality material stream to feed into domestic and international material markets.

National Recycling Goal and Goal to Reduce GHG Emissions from Materials – On November 17, 2020, at the America Recycles Summit, EPA announced the National Recycling Goal to increase the U.S. recycling rate to 50 percent by 2030 to galvanize action to further strengthen the U.S. recycling system. The national goal and associated indicators developed from specific metrics will provide the benchmarks needed to evaluate the success of the collective efforts to significantly improve the nation's recycling system. In 2021, EPA, in coordination with other interested stakeholders, intends to finalize the methodology for calculating the recycling rate, including which material streams will be included, as well as seek public comment on targets for the performance indicators that will support the National Recycling Goal.

Recycling, however, is not enough to achieve a circular economy. EPA has noted that natural resource extraction and processing activities account for approximately 50 percent of total global greenhouse gas (GHG) emissions (International Resource Panel, 2019), and global resource consumption has tripled over the past four decades (United Nations Environment Programme, 2016). Reducing GHG emissions from the production, use, consumption and disposal of materials can help countries meet the Paris Agreement 1.5˚C target. The Ellen MacArthur Foundation (2019a) reported that by applying circular economy strategies in five key materials (cement, aluminum, steel, plastics and food), 9.3 billion metric tons of annual GHG emissions of carbon dioxide could be reduced globally in 2050 – equivalent to cutting current emissions from all transport to zero. EPA is looking at developing a larger picture of the circular economy, which means that new metrics will be developed to determine our progress. With the release of

the National Recycling Strategy, EPA is also planning to announce that it will develop a national goal to reduce the greenhouse gas emissions from material consumption.

National Recycling Strategy and Implementation Plan – On November 15, 2021 EPA released the National Recycling Strategy (the Strategy) to identify key actions for improving the U.S. recycling system. The Strategy responds in part to Congress' request in 2019 for EPA to develop a "national recycling strategy to strengthen and sustain the current system with recommendations for voluntary actions." The initial draft of the Strategy focused on consumer recycling, particularly those materials that were suffering from challenges posed by the recent collapse of international markets (i.e., paper and plastics). It contained three objectives: reduce contamination in the recycling stream, improve processing efficiency, and increase markets. EPA has subsequently updated the Strategy based on the 156 public comment letters. Common themes among the commenters were to expand the Strategy beyond recycling to include other circular economy actions; incorporate equity and environmental justice, include increasing collection as an objective; and increasing the prominence of policies and measurement. The final version of the Strategy provides a vision for reframing recycling within a larger circular economy that can have large positive impacts on climate change, jobs, public health, and environmental justice. Because recycling alone is not enough to achieve sufficient impacts in these areas, EPA will develop subsequent strategies (on plastics, food/organics, electronics and critical minerals, textiles, the built environment, etc.) to fully encompass the actions needed to create a circular economy for all.

Infrastructure Investment and Jobs Act: President Biden signed into law the $1.2 trillion Law (IIJA) on November 15, 2021. The key recycling-related provisions are included in that version, including the text of the RECYCLE Act, funding for battery collection best practices, voluntary labeling programs and research, and solid waste infrastructure grant funding previously authorized under Save Our Seas 2.0.

V. Description and Tasks: ORCR seeks support in the visioning, research, data, and performance management aspects of our new Circular Economy Strategy, which will help us drive progress toward our 2030 national goal of increasing the recycling rate to 50% as well as reducing food loss and waste by 50% by 2030 and any additional goals we add. The purpose of this work is to ensure that the foundation of our strategy and goal efforts for the next ten years are based in sound science and research. ORCR wants to ensure that the best existing science and research are used, while at the same time identifying research gaps and needs to support the future of this work. In addition, ORCR wants to use the best possible existing data sources, while also developing new data to lead the world in making the circular economy a reality.

The Contractor shall support ORCR in the development of reports, web updates, toolkits, research, data, and analysis to support its vision for a circular economy. This will include any new Administration priorities and/or Congressional requests as they develop given the need to turn deliverables around quickly. The identified reports, analyses, and toolkits fulfill several domestic and international information needs.

Task 1: Task Order Administration (Base and Option Period)

The Contractor shall have conference calls with the TOCOR on a weekly basis after approval of the task order to plan and review progress of this TO. The Contractor will provide status updates on each task and the EPA TOCOR will discuss any technical issues related to completing each task. The EPA TOCOR will provide the Contractor with technical direction regarding the priority of the items for each task, including those that should be addressed by the next conference call. During the calls, the Contractor shall provide status updates on the progress of active work items. Upon request, the Contractor shall provide level-of-effort (LOE) estimates for implementing specific proposed work items.

The Contractor shall submit monthly progress reports (see "Reporting Requirements" section below), provide labor category estimates of resources for each task and subtask in any provided cost estimate, review and quality assure all work products, and keep the TOCOR informed of any problems that may impede project performance or delivery dates, along with any corrective actions needed by the Contractor or the TOCOR to solve such problems. The Contractor shall include a description of the work performed on each task in each monthly report.

Task 2: Reports, Documents and Analysis (Base Period)

The Contractor develop and support **two reports** in support of the vision toward a circular economy. The Reports and analyses should provide a greater understanding of the circular economy, materials management and recycling efforts and challenges in the United States and internationally. These reports shall not duplicate credible work already developed domestically or internationally, but rather draw on or refer to that body of work, where appropriate, and identify any gaps where more work is needed. Each of the reports will address climate change and environmental justice in all aspects of research, data, measurement, and analysis. Final reports and materials posted to the EPA website shall be 508 compliant. Below are details of four reports that will be needed under this Task.

A. The Road to a Circular Economy: Visionary Report and Implementation Plan

In June 2009, EPA published The Road Ahead. It was a vision for sustainable materials management that looked toward 2020. With the new climate reality and political landscape, ORCR wants to present a new vision of the Road Ahead. This new report will outline the path to a circular economy both nationally and internationally that is based on the best science, research, data, and analysis. In addition, it will provide a ten-year vision for the future of solid waste management in this country based on new technology and approaches to managing waste envisioned by a circular economy that seeks to ensure that materials remain in the economy. The report will outline actions needed from across the supply chain to support sustainable materials management and a circular economy and will focus on different materials, including materials like food, plastics, electronics and critical minerals, textiles, and construction and demolition and approaches like source reduction, reuse, recycling. The goal of this report is to support the policy, grant, and public education programs EPA will develop to respond to the increase in Administration and Congressional requests as well as requests and deliverables needed to inform international fora including the G7, G20, Commission on Environmental Cooperation (CEC),

International Resource Panel (IRP), Organization for Economic Co-operation and Development (OECD), and United Nations Environment Assembly (UNEA).

One important part of this work is to understand all aspects of the infrastructure implications including the type of infrastructure needed, the location, the cost, the potential jobs that may come from it, the economic impacts, and how technology innovations will impact what is needed. Finally, we need to understand the GHG impacts of this work. This report will also include an implementation plan that articulates the actions that EPA, other federal and state agencies, and non-governmental stakeholders will need to take to make a circular economy a reality. The model for implementation plan will be based on the Office of Water's (OW) Water Reuse Action Plan's (WRAP) website.

The Contractor shall support all aspects of report planning, including planning regular stakeholder and EPA planning meetings, developing meeting agendas and facilitating meetings The Contractor shall support all aspects of report development and release to the public including background research, data, analysis, report scoping and outline development, information/data gathering and analysis, report content development, and report drafting and finalization (including design and graphics). Other key performance objectives and deliverables under this task include, but are not limited to, the following:

- Contractor shall provide an outline for the Circular Economy Report and Implementation Plan. This outline shall be provided for EPA review prior to drafting the report.
- Contractor shall provide performance management information including what is needed to ensure the vision is executable, as well as organizational skills and capacity.
- Contractor shall develop and provide a 10-15-minute PowerPoint presentation summarizing the report.
- Contractor shall develop and provide a one-page factsheet summary of the report.
- Contractor shall develop a final report no longer than 100 pages, not including appendices.
- Develop a vision for Circular Economy and sustainability goals, metrics and indicators to inform policy decision-making for the United States.
- Develop web-based visualizations for conveying trends and their use to a variety of audiences as well as its relationship to Circular Economy and sustainability principles

Assumptions:

- One kick-off conference call or web meeting with EPA's planning team.
- Biweekly conference call or web meetings with EPA's planning team up to 60 minutes in length. EPA will provide the virtual meeting platform if necessary.
- Contractor will provide meeting notes and action items after each call to document decisions made and next steps.

B. Electronics and Critical Minerals Strategy

To facilitate a national Electronics and Critical Minerals Strategy, EPA is seeking Contractor support in all aspects of report planning, including research, data, analysis, and vision. This report will include an overview of how electronics are recycled today and a vision of their future management to maximize the capture of critical minerals when they are recycled. It will identify the current challenges and actions required to move forward. The report should include actions required by the federal government and private entities.

One important part of this work for EPA is understanding the infrastructure aspects of what is needed to achieve this vision. ORCR needs to understand all aspects of the infrastructure implications including the type of infrastructure needed, the location of where it is needed, the cost associated with it, the potential jobs that may come from it, the economic impacts of it, and how technology innovations will impact what is needed. Finally, we need to understand the GHG impacts of this process.

This strategy will identify actions and opportunities, including those to be taken by EPA, to increase recycling of electronics and to create a strategy to recover critical minerals from recycled electronics with a focus on batteries. The strategy will help EPA develop best practices for battery recycling to the value of material derived from recycling while providing for environmentally sound disposal. In addition to consulting with non-federal stakeholders, this strategy may be developed in coordination with federal partners, such as the Department of Energy. The strategy's actions will be informed by stakeholder input on the most critical needs, including EPA's ability and authority to act. While the timeframe for this strategy has not been determined, facilitation may be needed to develop the strategy.

Contractor support shall include all aspects of report development and release to the public including background research, report scoping and outline development, research, information/data gathering and analysis, report content development, and report drafting and finalization (including design and graphics). The report should utilize existing information/data, include the identification of key data gaps and ways to address these data gaps in the future. EPA will also consider new data identified by the Contractor. Data shall include case studies and reflect existing and proposed policies from the US and abroad as appropriate. Information and data used in the development of this strategy shall be publicly available. The strategy will be released for public comment and finalized based on those comments. For both the draft version released for public comment and the final version, Contractor support is needed for creating a publishable layout version with graphics.

The Contractor shall:

- Schedule regular meetings, develop meeting agendas, meeting facilitation, and meeting summary notes;
- Provide limited stakeholder engagement (e.g., conference calls) to inform the initial development of the Electronics and Critical Minerals Strategy;
- Contractor shall enhance the draft outline of the strategy. This outline will be provided for EPA review prior to drafting the strategy.

- Provide a draft version of the Electronics and Critical Minerals Strategy released for public comment in a publishable format, with layout and graphics. The draft released for public comment shall be 508 compliant.
- Provide a final version of the Electronics and Critical Minerals Strategy in a publishable layout, with graphics. These documents will not be printed but will be available for download on EPA's website.
- Contractor shall provide performance management information including what is needed to ensure the vision is executable, as well as organizational skills and capacity.
- Develop and provide a 10-15-minute PowerPoint presentation summarizing the Electronics and Critical Minerals Strategy.
- Develop and provide a one-page factsheet summary of the Strategy.
- Provide an analysis of public comments received in accordance with Task 7 of the SOW.

Assumptions:

- Assume at minimum two outlines, 4-8 pages each.
- One kick-off conference call or web meeting with EPA's planning team up to 90 minutes in length.
- EPA will provide the virtual meeting platform if necessary.
- Contractor shall provide meeting notes and action items after each call to document decisions made and next steps.
- Creation of an annotated bibliography on information and data resources.
- Report length up to 50 pages and shall be 508 compliant.

Task 3: Support for River Pollution Reduction (Base Period)

EPA has entered into a Memorandum of Understanding (MOU) with the Mississippi River Cities and Towns Initiative (MRCTI). This collaboration can provide opportunities to reduce plastic pollution in the Mississippi River, which could be a model for other communities in the United States and internationally. Collaboration will likely involve engaging key stakeholders, providing technical assistance, sharing best practices, identifying potential sources of funding for projects, and sharing data and results from projects.

The MRCTI is a group of over 100 Mayors from cities along the Mississippi River who collaborate on economic, social, and environmental issues associated with the Mississippi River, including pollution associated with trash that is entering the river. The MRCTI wants to work with EPA on source reduction, prevention of trash and litter, solid waste infrastructure, and assisting underserved communities with solid waste concerns. The MRCTI is a unique collaboration because the cities along the Mississippi River have traditionally had a good working relationship and communication network, and thus the results of their projects can more easily spread across a large geographic area.

The Contractor shall:

- Research any data or analysis for post-consumer materials management in the Mississippi

river watershed
- Prepare a report, no longer than 30 pages in length including appendices, outlining the opportunities for improving post-consumers materials management. in this region. The report should include infographics and graphical representation of these challenges/opportunities.

Assumptions:

- EPA has entered into the agreement, and the work is funded.
- One kick-off conference call or web meeting with the TOCOR and up to ten EPA staff, up to 90 minutes in length.
- Biweekly conference call or web meetings (approximately 20 total) with the above staff, up to sixty minutes in length.
- EPA will provide the virtual meeting platform if necessary.
- Contractor shall provide meeting notes and action items after each call to document decisions made and next steps.

Task 4: Recycling Market Analysis (Base Period)

One part of the National Recycling Strategy states that there is confusion about what and how to recycle in this country. Based on research, science, and analysis, EPA would like to present a future vision of recycling that starts with going back to the basics of what is currently actually recyclable and has value as a commodity while adding in new materials as the infrastructure and markets allow. Part of this report will include the messaging needed to simplify recycling and provide a uniform national approach. This analysis will include the economic support for how a locality could begin a recycling program based on the most valuable recycled materials. Contractor support shall include all aspects of report development and release to the public including background research, report scoping and outline development, research, information/data gathering and analysis, report content development, and report drafting and finalization (including design and graphics). The report should utilize existing information/data, include the identification of key data gaps and ways to address these data gaps in the future. EPA will also consider new data identified by the Contractor. Data shall include case studies and reflect existing and proposed policies from the US and abroad as appropriate. Information and data used in the development of this strategy shall be publicly available. The strategy will be released for public comment and finalized based on those comments. For both the draft version released for public comment and the final version, Contractor support is needed for creating a publishable layout version with graphics.

Assumptions:

- One kick-off conference call or web meeting with the TOCOR and up to ten EPA staff, up to 90 minutes in length.
- Biweekly conference call or web meetings (approximately 20 total) with the above staff, up to sixty minutes in length.

- Contractor shall provide meeting notes and action items after each call to document decisions made and next steps.
- Contractor shall enhance the draft outline of the report. This outline will be provided for EPA review prior to drafting the strategy, assuming at minimum two outlines, 4-8 pages each.
- Report length shall be 80 pages in length and shall be 508 compliant
- Contractor shall provide PowerPoint slides summarizing the work and a one-page factsheet summary
- Creation of an annotated bibliography on information and data resources

Task 5: Bipartisan Infrastructure Law - Battery Collection Best Practices and Voluntary Labeling Guidelines: Implementation Strategy and Reports (Base Period)

The batteries component of the Bipartisan Infrastructure Law provides $10,000,000 for fiscal year 2022 to develop best practices that may be implemented by state, tribal, and local governments with respect to the collection of batteries to be recycled and provides $15,000,000 for fiscal year 2022 to establish a program to promote battery recycling through the development of voluntary labeling guidelines for batteries and other forms of communication materials. The Agency needs an overall strategy for developing and implementing the battery collection best practices and the voluntary labeling program guidelines and communication materials. In addition to this Implementation Strategy, the Agency also needs a report on the current state of battery collection and recycling best practices and a second report focused on the "current state" of voluntary labeling guidelines.

The Contractor shall:

- Develop a strategy for developing and implementing the battery collection best practices and voluntary labeling guidelines required by the Bipartisan Infrastructure Law.
    - The Strategy shall include approaches and concepts for fulfilling the requirements of the BIL, including options for developing the battery collection best practices and battery labeling guidelines and program; and a communication, outreach, and marketing strategy.
    - The strategy should align with the Bipartisan Infrastructure Law's 5-year timeframe to apply the designated funds efficiently and effectively.
    - The strategy also shall include performance management information (e.g., what is needed to ensure the strategy is executable), as well as necessary organizational skills and capacity.

- In addition, for the battery collection best practices:
    - Develop a "current state of battery collection" analysis report summarizing current related efforts underway and a memorandum with recommendations for the scope of the battery collection best practices report based on the findings from the analysis report.
    - Develop a battery collection best practices report based on the "current state of battery collection" analysis report, input received from the Agency's request for information notice (anticipated to be released in April 2022) and stakeholder

engagement meetings initiated in summer of 2022.

- In addition, for the Voluntary Labeling Guidelines:
    - Develop a "current state of battery end-of-life labeling guidelines and communication materials" report that includes recommendations to support the Agency's efforts to develop the voluntary labeling guidelines for batteries and communications materials.
    - Develop the battery voluntary labeling guidelines document and communication materials based on the analysis report and input received from the Agency's request for information notice and near-term stakeholder engagement meetings.

Assumptions:

- One kick-off conference call or web meeting with EPA's planning team.
- Biweekly conference call or web meetings with EPA's team up to 60 minutes in length. EPA will provide the virtual meeting platform if necessary.
- Contractor will provide meeting notes and action items after each call to document decisions made and next steps.

Task 6: Support for development of a web-based interface for WARM and Materials Dashboard (Base and All Option Periods)

WARM

EPA's Waste Reduction Model (WARM) has been helping solid waste planners and organizations track and voluntarily report GHG emissions reductions, energy savings, and economic impacts from several different waste management practices. WARM calculates and totals these impacts from baseline and alternative waste management practices—source reduction, recycling, anaerobic digestion, combustion, composting and landfilling. WARM has been primarily provided in the form of an Excel spreadsheet file, with the recent inclusion of a version of WARM in the openLCA software environment. For several years, a web-based version of WARM was also available for users on EPA's website. Due to the burden of maintaining and updating three different versions of WARM interfaces, as well as the graphical limitations of EPA's web environment at the time, the web-based WARM interface was not maintained and has not been available to the public for several years.

In recent years, EPA has improved its web content management system and increased the number of code libraries that are compatible with the EPA web environment, which is based on Drupal. These advances have created the opportunity to rebuild a web-based user interface for WARM in the Drupal environment that meets the modern graphical needs of WARM. A new, web-based WARM interface could serve as the primary user interface for WARM users, potentially eliminating the need to maintain public-facing Excel and openLCA user interfaces. It would also potentially eliminate concerns about unequal access to WARM, as a web-based interface would not require the installation of often-costly software packages.

EPA is still working to improve and update the current Excel and openLCA interfaces, alongside making improvements and changes to the underlying model itself. This will need to be

considered as the web interface is being designed and developed; there may be important changes to WARM that occur during design and development of the web interface. EPA also expects certain future changes to the structure and functionality of the model that will also need to be taken into account. For example, EPA is working to add more environmental indicators (beyond GHGs) to WARM, such as water use, toxicity, etc.

Also, EPA ORD developed the MSW Decision Support Tool (DST) intended for use by solid waste planners at state and local levels to analyze and compare MSW management strategies with respect to GHGs and also cost, energy consumption, and environmental releases to air, land, and water. It models emissions associated with municipal waste activities, including source reduction, waste collection and transportation, materials recovery facilities, transfer stations, compost facilities, combustion and refuse-derived fuel facilities, and landfills. ORCR is interested in determining how to make the WARM and MSW DST complementary tools.

Materials Dashboard

Additionally, ORCR seeks to develop a "sustainable materials management interactive web dashboard" that will portray the environmental, social, and economic impacts of the U.S. production, consumption, use and disposal of materials over time. The dashboard would monitor progress toward U.S. material-related environmental goals, enable comparing U.S. material-related trends on a global level, and serve as a "highly-informative" resource to the general public. Presently, this type of information is highly decentralized across public and private sectors in the U.S. and internationally. This dashboard should bring relevant information together in a cohesive manner and lend toward material-related goal setting and action by all sectors of society. Presently, EPA established a 50% Recycling goal and a 50% Reduction in Food Waste goal. EPA recently committed to developing a materials-related climate change goal.
During the summer of 2021, ORCR identified an internal ORCR/RCSD workgroup to guide the development of the dashboard. The group had been using a facilitated user-centered design process to get the work underway, receiving support under NIH CIO-SP3 contract HHSN316201200013W, task order EP-G16H-01256, technical directive document 2-39 SMM Applications. The workgroup produced a draft vision statement (needing management approval) and a very rough conceptual draft of the dashboard.

Both the WARM web-based user interface and the Materials Dashboard will be drawing information from EPA's Office of Research and Development's (ORD) United States Environmentally-Extended Input-Output model (USEEIO). The model (a family of models) combines data on economic transactions between industry sectors with environmental information, including data on land, water, energy and mineral use, air pollution, nutrients, and toxics, as well as waste. Data used are publicly available government data sources. ORD continues to improve, update, and expand emissions, resources, and waste inventories. ORD builds these models and datasets using an LCA tool ecosystem where each of the components are maintained in a USEPA GitHub repository. ORD prepares LCA datasets for sharing on the Federal LCA Commons data portal at lcacommons.gov. ORD is developing a standard list of materials and waste names (i.e., technosphere flows/wastes) that will follow the structure and function of the elementary flows list in the Federal Commons. These models are expanding to include state-specific models, the global level, material/energy/waste tracking (i.e., physical

material-based I-O vs. sector/commodity-based I-O), scenario analysis, and adding additional indicators, one or more economic subsystems, enhancing waste sector resolution, and potentially household ("use phase") emissions/resources. The work also includes: creating within the USEEIO Modeling Framework the capability to build models that hybridize the USEEIO monetary IO model with standardized process-based life cycle inventory data; creation of waste (and physical) input-output models that incorporate an increasing number and complexity of materials and waste processes; and functionality to enable modifying final demand vectors to include demand of recycled materials and use the recycled content approach to modify final dollar demand amounts.

Under this task the Contractor shall:

WARM

- Develop options for addressing presenting results of additional indicators and improvements that the underlying model may provide, such as additional environmental impacts in WARM.
- Develop, test, and stage the WARM web-based interface and modifications using agile and iterative practices.
- Development of FAQs, webpages, user guide, as appropriate.
- Provide accessibility testing and documentation for Federal Information Technology Acquisition Reform Act (FITARA) and Section 508 compliance.
- Ensure all source code is regularly updated in the appropriate EPA GitHub repository and final source code is posted.
- Collaborate with EPA web contractors providing support for converting the SMM Prioritization Tools to EPA's web environment (Drupal) under a separate EPA contract.
- Assistance in responding to issues on-line interface, as appropriate.
- Develop options (up to three) for making WARM and MSW DST more complementary tools.

Materials Dashboard

- Facilitated workgroup support with note-taking for up to 10 meetings.
- Options for Dashboard Landing Page (up to three).
- Options for provisioning systems (up to three).
- Options for Dashboard user journey (up to three).
- Identification and development of key metrics (beyond goals), where needed .
- Timely engagement of key experts (e.g., EPA, USGS, USDA, DOE, etc….) on data/information availability and limitations.
- Develop and assist in posting dashboard
    - Draft and final materials and climate change webpage (replacement or update of current online version)
    - Integrate systems pie chart useeio-widget (under development) into the dashboard
    - Drafts and final interactive dashboard
    - Develop, test, and stage dashboard using agile and iterative practices.

- Provide accessibility testing and documentation for Federal Information Technology Acquisition Reform Act (FITARA) and Section 508 compliance.
- Ensure any source code involved is regularly updated in the appropriate EPA GitHub repository and final source code is posted.
- Collaborate with EPA web contractors providing support for converting dashboard to EPA's web environment (Drupal) under a separate EPA contract.

Assumptions:

- One kick-off conference call or web meeting with the TOCOR and up to ten EPA staff, up to 90 minutes in length.
- Biweekly conference call or web meetings (approximately 20 total) with the above staff, up to sixty minutes in length.
- EPA will provide the virtual meeting platform if necessary.
- Contractor shall provide meeting notes and action items after each call to document decisions made and next steps.

Task 7: Comment Review and Summary Report (Base and Option Periods)

Documents and reports may need to undergo solicitation of public comments and/or internal review. EPA anticipates seeking public comment on the drafts of the Circular Economy Vision and Implementation and the Electronics Strategy. In some cases, such as internal review or wider Federal government review, EPA will ask for "show-stopper" comments, in addition to overall comments. Show-stopper comments would be addressed before a document or report would be released to the public, while overall comments would be collected and addressed with public comments. The Contractor shall assist by organizing (compiling, categorizing, and summarizing), analyzing and rank ordering (if needed) comments received on the draft documents and reports. In providing support for this sub-task, the Contractor shall assist in:

- Identifying a software tool to efficiently process, categorize, aggregate, summarize, and draft responses to comments;
- Enabling access to the software tool for up to six EPA users;
- Providing basic training to EPA on the core functions of the software tool;
- Retrieving comments from the Federal Docket Management System (FDMS)/Regulations.Gov;
- Retaining a copy of all comments for EPA's archive system;
- Converting comments from their native format to text;
- Creating a web-based tracking database of all comments/responses/categories with the latest data available to view/print in spreadsheets and text;
- Determining best elements for providing helpful information from comments received; and
- Providing statistical and substantive summary analysis of the comments received and development of talking points related to these analyses.

Key performance objectives and deliverables under this task include, but are not limited to, the following:

- **Inputting Comments into and EPA Accessible and Searchable Database.** The Contractor shall input the comments into a database that can be used to search and extract comments.
- **High-level summary of the public comment period.** The Contractor shall provide a brief report (five pages) summarizing high-level results of the comment period, including the number of commenters, which organizations submitted letters, and distribution of comments by topic, among other statistics.
- **Quantitative analytical summary of comment results.** Where applicable, EPA will provide Contractor with comment categorization requirements and/or workbook templates in which to organize the comments. The Contractor shall use these resources to develop a more in-depth analytical summary of the public comments, including but not limited to numerical tallies of indicated public preference for or against various comment period topics posed.
- **Long-form comment summary**. The Contractor shall provide EPA with a more in-depth report listing key comments from stakeholders, comment excerpts that support results of the analytical summary, as well as other common themes identified during the quantitative analysis.
- **Topic-specific comment aggregation**. If requested by EPA, the Contractor shall search the comment set and compile all comment excerpts of a particular theme or key words into a word document.

Assumptions:

- Analysis of up to 1000-2000 comments received from EPA, federal agencies and general public on the plans and reports described in Task B as well as additional activities described in Task C.
- EPA will need comment analysis for, at a minimum, The Circular Economy Visions and Implementation Strategy and the Electronics and Critical Minerals Strategy.
- EPA anticipates that additional comment analysis may be needed in the future.

Task 8: Stakeholder Engagement and Outreach to Support Development of Reports/Strategies (Base and All Option Periods)

Some reports may require stakeholder engagement. The purpose of this task is to support the engagement, planning, and facilitation of stakeholder meetings to inform the development of the various reports and strategies outlined above. Stakeholder engagement is also needed in developing the reports described in Task B.

Key performance objectives and deliverables under this task include, but are not limited to, the following:

1. **Stakeholder Engagement Meetings – Design, Planning and Preparation**

   The Contractor shall conduct a kickoff meeting with the EPA TOCOR, EPA technical POC, and EPA planning team to discuss the design, schedule, and any necessary background materials. During the kickoff meeting, the government representatives shall

provide detailed information on any discussions that have taken place internally at the EPA and with external stakeholders to date, noting:

- Goals and outcomes of the stakeholder meetings
- List of potential stakeholders identified to date
- List of any stakeholders that have been contacted
- List of potential topics to be discussed at the meetings
- History of involvement of identified stakeholders in previous or continuing discussions

Assumptions:

- Up to 15 stakeholder engagements conducted by virtual meetings at 60 minutes each.
- Around 30-45 non-EPA attendees participating in the conference call or web stakeholder meetings.
- One kick-off conference call or web meeting with EPA's planning team up to 60 minutes in length for each stakeholder engagement.
- Up to 20 virtual meetings with EPA's planning team up to 60 minutes in length to prepare for stakeholder meetings.
- EPA will provide the virtual platform if necessary.

2. Stakeholder Engagement - Design, Agendas, Background Materials

The Contractor shall assist the EPA TOCOR and EPA planning team in designing agendas and formats for up to 15 stakeholder meetings that will enable approximately 30-45 participants per meeting (mix of federal, state, local government; industry; trade associations; academia; and nongovernmental organizations (NGOs) to engage in the discussion and contribute to the objective of the meeting. Activities shall include, but not be limited to:

- Meeting with the EPA TOCOR to discuss substantive, procedural, and process design issues,
- Assisting in the design and format of the meetings,
- Stakeholder outreach and help identifying potential stakeholders,
- Assisting in the development and distribution of the agendas and background materials for the events, and
- Collecting and incorporating comments, suggestions, and changes into the documents from EPA planning team.

Assumptions:

- All documents produced and distributed electronically.

3. Stakeholder Engagement – Facilitation and Logistics

The Contractor shall facilitate the Stakeholder Engagement events consisting of approximately 30-45 participants per call (mix of federal, state, local government; industry; trade associations; academia; and NGOs) and ten EPA participants. Each meeting will run around 60 minutes in length. The meetings will be held virtually. The Contractor shall also take notes and capture key information from the Stakeholder Meetings and submit them in the form of a Meeting Summary.

a. Meeting Facilitation: The Contractor shall facilitate the discussion at the stakeholder meetings. As facilitator, the Contractor shall assist participants in articulating their interests and identifying areas of agreement and difference between them. As facilitator, they shall keep the parties talking, listening, and making progress towards the desired outcomes as much as possible. The facilitator shall not take a position on the merits nor recommend to the parties what the substantive resolution of an issue could be.

b. Logistics and Support: The Contractor shall provide meeting support. For planning/costing purposes, include:
   - An appropriate virtual platform for the meeting, if needed
   - All necessary equipment and supplies
   - Confirm attendance of participants
   - Capture attendance of participants
   - Electronic distribution of final agenda and materials to all confirmed participants prior to meeting
   - Support preventing and responding to technical issues associated with virtual platform and meeting

c. Speakers/Presenters: The Contractor shall assist in arranging for speakers and presenters, where needed. The Contractor shall assist in preparing speakers/presenters for their session.

d. Note-taking and Meeting Summary: The Contractor shall take notes and capture key information and findings during the stakeholder meetings. The Contractor shall furnish draft and final summaries of the meetings. The final summary shall be submitted in MS Word electronic format. The contents shall include:
   - A summary of the event including the issues and commitments discussed, the resolutions of the issues, the parties involved and next steps. The Contractor shall include any graphics or photographs that are useful in describing the activities of the participants or the accomplishments of the group.
   - The meeting summaries should identify the sentiments and potential commitments of stakeholders, including other agencies.
   - The Contractor shall include any graphics or photographs that are useful in describing the activities of the participants or the accomplishments of the group.

- The Contractor shall maintain copies of or references to web URL locations for documents compiled by or agreed upon at the meetings (ground rules, agreements, statements, fact sheets, etc).
- Mailing list for the participants or interested parties.

Assumptions:

- Up to 15 stakeholder engagements via virtual meetings at 60 minutes each.
- Around 30-45 participants per call (mix of federal, state, local government; industry; trade associations; academia; and NGOs); and up to 10 from EPA.
- Meetings are held virtually.
- A registration system is not needed.
- Attendees will be tracked in notes the Contractor takes.

VI. QA Requirements:

The Contractor shall perform quality assurance (QA)/quality control of all data, any calculations, quantitative and qualitative information, and text in all reports, handouts, slides, and any other documentation and/or spreadsheets used to satisfy the tasks under this SOW. If the Contractor identifies any quality assurance issues and/or challenges they will quickly bring it to the attention of the assigned TOCOR and Alternate TOCOR. The Contractor shall plan and do quality assurance as needed to ensure that all documents and services are of good quality and easily understood by both the EPA and any outside stakeholders. Furthermore, the data shall be adequate and sufficient for their intended use. The Contractor shall be in compliance with the requirements of CIO 2105.0, *Policy and Program Requirements for the Mandatory Agency Wide Quality System* and the *American National Standard-Specifications and Guidelines for Environmental Data Collection and Environmental Technology Programs* (ANSI/ASQC-E4-2014). Consistent with these requirements, the Contractor shall develop a task order Quality Assurance Project Plan.

A. **Quality Assurance Project Plans (QAPP).** The Contractor shall develop a task order QAPP to provide a plan for obtaining, using, storing, and retrieving the type and quality of environmental data needed for EPA's effort to environmental data and metrics for circular economy described in this SOW. The QAPP should document how quality assurance (QA) and quality control (QC) activities are applied to environmental data operations to assure that the results obtained are of the type and quality needed and expected.

1. Within one month of the effective date of the TO, the Contractor shall submit a draft QAPP in Microsoft Word format, divided by sections that describe the policies, organization, objectives, functional guidelines, and specific QA/QC activities designed to achieve the data quality requirements of the task order. The QAPP shall provide a level of detail and organization that is consistent with EPA QA/R-5, *EPA Requirements for Quality Assurance Project Plans* which can found at https://www.epa.gov/quality/epa-qar-5-epa-requirements-quality-assurance-project-plans. Additional guidance on developing the QAPP is available in EPA's *Guidance for Quality Assurance Project Plans EPA QA/G-5* which can be found at

https://www.epa.gov/sites/production/files/2015-06/documents/g5-final.pdf.

2. With consultation from the Quality Assurance Manager (QAM) or the Delegated Quality Assurance Officer (DQAO), the work required in this Task Order has been preliminarily determined to be classified as Category 2by the TOCOR.

3. The TOCOR will review the quality documentation and provide comments to the Contractor in writing within two weeks. EPA will provide comments to the submitted draft QAPP in writing or directly on a digital file. The Contractor shall revise the QAPP and resubmit it to the EPA for approval within one week. The revised QAPP will be the official QAPP for the task order.

4. Incorporation of Standard Operating Procedures (SOPs) - When addressing the data acquisition elements in the task order QAPP, detailed copies of quality assurance methods and/or SOPs can be either included directly in the discussion, provided as attachments to the QAPP, or, if easily obtained and readily available to all project participants (e.g., American Society for Testing and Materials (ASTM) methods), cited within the discussion and included in the reference list. Detailed copies of the methods and/or SOPs must accompany the QAPP either in the text or as attachments. All SOPs referenced in each activity performed by the Contractor shall be submitted as part of the applicable QAPP. The SOPs shall be written to be consistent with EPA QA/G-6 titled *Guidance for Preparing Standard Operating procedures (SOPs)*, which can found at https://www.epa.gov/quality/guidance-preparing-standard-operating-procedures-epa-qag-6-march-2001.

5. QAPP Amendments – During the term of the contract, the Contractor shall revise and maintain on file, with all previous revisions, an amended QAPP within 30 days of the following circumstances:
   a. The Agency modifies the contract.
   b. The Agency notifies the Contractor of deficiencies in the QAPP document resulting from the Agency's review of the Contractor's performance.
   c. The Contractor identifies deficiencies resulting from their internal review of the QAPP document.
   d. The Contractor's organization, personnel, facility, equipment, policies, or procedures change.
   e. The Contractor identifies deficiencies resulting from the internal review of their organization personnel, facility, equipment, policies, or procedures.

6. Document Control - When the QAPP or any SOP is amended, all changes shall be clearly marked with a bar in the margin indicating where the change is found in the document, or by highlighting the change by underlining, bold printing, or using a different print font. The amended section pages shall have the date on which the changes were implemented. Any changes in the QAPP shall be submitted to the EPA Project Officer for approval before implementation.

7. QAPP and SOP Archival- The Contractor shall maintain a master QAPP which incorporates the original QAPP and all subsequent amendments. The Contractor shall provide a copy of the master QAPP (including the SOPs) and any of its attachments to the designated recipients within 14 days of a request.

VII. Deliverables:

Task Number	Title	Due Date
Task 1	**Task Order Administration**	30 Days after task order award.
Task 2.A	**The Road to a Circular Economy**	As mutually agreed to between TOCOR and Contractor
Task 2.B	**Electronics and Critical Minerals Strategy**	As mutually agreed to between TOCOR and Contractor
Task 3	**Support for River Pollution Reduction**	As mutually agreed to between TOCOR and Contractor
Task 4	**Recycling Market Analysis**	As mutually agreed to between TOCOR and Contractor
Task 5	• **Strategy for Implementing Battery Collection Best Practices and Voluntary Labeling Guidelines for Batteries and Communication Materials under the Bipartisan Infrastructure Law** • **Analysis Report on Current State of Battery Recycling** • **Initial Battery Collection Best Practices Report** • **Current State of Battery Labeling Guidelines Report** • **Battery Voluntary Labeling Guidelines Document and Communication Materials**	As mutually agreed to between TOCOR and Contractor
Task 6	• **Web-based WARM User Interface** • **SMM Dashboard Prototype**	As mutually agreed to between TOCOR and Contractor
Task 7	**Comment Review and Summary Report**	As needed based on report
Task 8	**Stakeholder Engagement**	As needed based on the report

VIII. Reporting Requirements:

1. If any problems arise that would impede performance, Contractor shall inform the EPA TOCOR immediately (by phone or email) and provide information needed to resolve the problem(s).

2. The Contractor shall submit monthly progress reports to the EPA TOCOR in accordance with the terms and conditions of the contract and advise the TOCOR about problems in a timely manner, but at a minimum, via the monthly progress reports.

3. The Contractor shall deliver all draft and final work products in accordance with the contract. In addition, the Contractor shall deliver to the TOCOR each draft and final deliverable in an electronic format that is compatible with EPA-installed application software which includes word processing software Microsoft Word, spreadsheet software Microsoft Excel, and database management software Microsoft Access. Draft and final deliverables that will be posted online or otherwise available to the public shall be 508 compliant.

4. The Contractor shall ensure that all electronic work products are free of computer viruses, malware, or spyware.